AMENDMENTS TO THE CLAIMS

1. (currently amended)   A method for managing data of an optical disc, the optical disc
comprising having a plurality of areas, each area having a plurality of data blocks and
5   a plurality of spare blocks arranged in order, each of the data blocks being used to
record data, and each of the spare blocks being capable of replacing a corresponding
defective data block to record data, the method comprising:

establishing a status table, wherein the status table comprises a plurality of columns
10   arranged in order, and each of the columns is used to record a status of a
corresponding spare block; and
recording the statuses of the spare blocks in the status table according to the
arranging order of the spare blocks:
wherein, within the status table, a first column recording a status of a last spare block
15   in a first area neighbors a second column recording a status of a first spare
block in a next area.

2. (original)   The method of claim 1 wherein when the statuses of a first spare block, of
a second spare block, and of a third spare block are respectively recorded in a first
20   column, a second column, and a third column, the second column is located between
the first column and the third column, the status of the first spare block is the same
as the status of the third spare block, and there is not any data block located between
the first spare block and the third spare block, when recording the statuses of the
spare blocks in the status table, if the status of the second spare block is changed, the
25   changed status of the second spare block is recorded in one of the columns, which is
located between the first column and the third column.

3. (original)   The method of claim 1 wherein each of the spare blocks could be

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determined whether the spare block is defective according to the data recorded in the columns.

4. (original)   The method of claim 1 wherein each of the spare blocks could be
5   determined whether the spare block has been used to replace a corresponding
           defective data block according to the data recorded in the columns.

5. (original)   The method of claim 1 for an optical disc drive wherein the optical disc
           drive comprises a memory for storing the status table while the status table is
10   established.

6. (original)   The method of claim 1 wherein there is a defective second spare block
           located between a first spare block and a third spare block, the first spare block and
           the third spare block are not defective, and there is not any data block located
15   between the first spare block and the third spare block, when recording the statuses
           of the spare blocks in the status table, the statuses of the first spare block, of the
           second spare block, and of the third spare block are respectively recorded in a first
           column, a second column, and a third column, wherein the second column is located
           between the first column and the third column.
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7. (new) The method of claim 1 further comprising including other related data in each
           column of the status table.

8. (new) The method of claim 7 further comprising including an address of a substituted
25   defective data block in a mapping field of the status table for columns having a used
           status of corresponding spare blocks

9. (new) The method of claim 1 being for an optical disc drive, the method further

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comprising:

providing a memory installed in the optical disc drive;

5   reading a defect table from the optical disc into the memory of the optical disc drive; and

establishing the status table according to the defect table in the memory.

10   10. (new) The method of claim 1 further comprising reading the status table from the optical disc.

11. (new) The method of claim 1 further comprising writing the status table to the optical disc if the status table is changed during a session.

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12. (new) The method of claim 11 further comprising writing the status table to a predetermined location on the optical disc.

13. (new) The method of claim 1 further comprising calculating statistic data of the
20   optical disc according to the status table.

14. (new) The method of claim 13 further comprising accessing data on the optical disc at a high speed if the statistic data indicates a number of defective blocks on the optical disc is less than a predetermined threshold.

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15. (new) The method of claim 13 further comprising accessing data on the optical disc at a low speed if the statistic data indicates a number of defective blocks on the optical disc is greater than a predetermined threshold.

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16. (new) The method of claim 13 further comprising calculating a distribution status of used spare blocks on the optical disc according to the status table.

5   17. (new) The method of claim 16 being for an optical disc drive, the method further comprising:

   providing a memory installed in the optical disc drive; and

10   pre-reading into the memory a group of spare blocks being within a region having the most spare blocks on the optical disc.

18. (new) The method of claim 17 further comprising not moving a pick-up head of the optical disc drive to access spare blocks on the optical disc being within the group of
15   spare blocks that were already pre-read into the memory.

7